

Subject Index

Accessibility

Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis 145

Acetic acid

Synthesis of acetic acid from methanol alone by homogeneous metal complex catalyst. Part II ¹. Mechanistic study on methyl acetate formation from methanol alone by $[(\eta^2-C_5H_5)(PPh_3)_2RuX]$ ($X = Cl, SnF_3$) complex catalyst 35

Acidic properties

Influence of hydrogen sulfide adsorption on the catalytic properties of metal oxides 49

Active site number

Comparison of methane hydroxylation activity with intact cells and cell-free extracts of *Methylosinus trichosporium* OB3b L135

Alkenes

Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79

Allyl

Complex catalysis. Part XLVI ¹. The mechanism of mol mass regulation in the allyl nickel complex catalyzed 1,4-*cis* polymerization of butadiene 21

ALPO₄-5 supported vanadium

Oxidative dehydrogenation of propane on VAPO-5, V₂O₅/ALPO₄-5 and V₂O₅/MgO catalysts. Nature of selective sites 173

Aluminium

Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites 139

Anionic bases

Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79

Aqueous conditions

Palladium-catalyzed, arylation of ethylene (the Heck reaction) under aqueous conditions 73

Arene oxide

Oxidation of methoxybenzenes to *p*-benzoquinones catalyzed by methyltrioxorhenium(VII) 15

Arylation

Palladium-catalyzed, arylation of ethylene (the Heck reaction) under aqueous conditions 73

Autooxidation

Effects of sodium dodecyl sulphate concentration on the autooxidation of 3,5-di-*tert*-butylcatechol in solutions of hydrated transition metal ions L135

Autoxidation

Effects of solvents on the cobalt phthalocyanine-catalyzed oxidation of hydrophobic thiols 7

Bentonite

Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites 139

Bilirubin

On the molecular weight of bilirubin oxidase from *Penicillium janthinellum* L3

Bilirubin oxidase

On the molecular weight of bilirubin oxidase from *Penicillium janthinellum* L3

Biliverdin

On the molecular weight of bilirubin oxidase from *Penicillium janthinellum* L3

BINAS-Na

Water-soluble metal complexes and catalysts. Part 7 ¹. New efficient water-soluble catalysts for two-phase olefin hydroformylation: BINAS-Na, a superlative in propene hydroformylation 65

Biomimetic catalyst

Study of catalytic activity of nitro substituted ironporphyrins 41

Bismuth

Effect of pH in the Pt-catalyzed oxidation of D-glucose to D-gluconic acid 111

Butadiene

Complex catalysis. Part XLVI ¹. The mechanism of mol mass regulation in the allyl nickel complex catalyzed 1,4-*cis* polymerization of butadiene 21

Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity 29

Candida cylindracea

Activity decay and conformational change of lipase in presence of organic solvents. A fluorescence study of *Candida rugosa* lipase 119

Alteration of the activity and selectivity of immobilized lipases by the effect of the amount of water in the organic medium 195

Candida rugosa

Activity decay and conformational change of lipase in presence of organic solvents. A fluorescence study of *Candida rugosa* lipase 119

Catechols

Synthetic mimics of tyrosinase: catechols from *ortho*-, *meta*- and *para*-substituted phenols and copper(I) complexes 187

Chlorinated hydrocarbons

Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites 139

Chromium

Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites 139

1,4-Cis polymerization

Complex catalysis. Part XLVI ¹. The mechanism of mol mass regulation in the allyl nickel complex catalyzed 1,4-cis polymerization of butadiene 21

Cobalt(II)

Effects of solvents on the cobalt phthalocyanine-catalyzed oxidation of hydrophobic thiols 7

Copper

A copper/silica catalyst prepared from a monolayer film of copper 2,2'-bipyridine dimer on Cab-O-Sil 85

Copper complexes

Synthetic mimics of tyrosinase: catechols from *ortho*-, *meta*- and *para*-substituted phenols and copper(I) complexes 187

CPDOR NMR

Stacked phthalocyanines in VPI-5 pores as evidenced by CPDOR ¹H-²⁷Al NMR 183

Crystallite distribution

Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis 145

Cyclohexane

Study of catalytic activity of nitro substituted ironporphyrins 41

Cytochrome P-450 model

Study of catalytic activity of nitro substituted ironporphyrins 41

Deep oxidation

Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites 139

Dehydrogenation

Oxidative dehydrogenation of propane on VAPO-5, V₂O₅/ALPO₄-5 and V₂O₅/MgO catalysts. Nature of selective sites 173

3,5-di-*tert*-Butylcatechol

Effects of sodium dodecyl sulphate concentration on the autooxidation of 3,5-di-*tert*-butylcatechol in solutions of hydrated transition metal ions L135

1-Dodecanethiol

Effects of solvents on the cobalt phthalocyanine-catalyzed oxidation of hydrophobic thiols 7

Enantioselectivity

Alteration of the activity and selectivity of immobilized lipases by the effect of the amount of water in the organic medium 195

Encapsulation

Stacked phthalocyanines in VPI-5 pores as evidenced by CPDOR ¹H-²⁷Al NMR 183

Epoxidation

Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79

ESR

Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis 145

Esterification

Alteration of the activity and selectivity of immobilized lipases by the effect of the amount of water in the organic medium 195

Ethylene

Palladium-catalyzed, arylation of ethylene (the Heck reaction) under aqueous conditions 73

Fluorescence

Activity decay and conformational change of lipase in presence of organic solvents. A fluorescence study of *Candida rugosa* lipase 119

Force field calculations

Synthetic mimics of tyrosinase: catechols from *ortho*-, *meta*- and *para*-substituted phenols and copper(I) complexes 187

Gamma rays

Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis 145

D-Gluconic acid

Effect of pH in the Pt-catalyzed oxidation of D-glucose to D-gluconic acid 111

D-Glucose

Effect of pH in the Pt-catalyzed oxidation of D-glucose to D-gluconic acid 111

H₂S adsorption

Influence of hydrogen sulfide adsorption on the catalytic properties of metal oxides 49

Heck reaction

Palladium-catalyzed, arylation of ethylene (the Heck reaction) under aqueous conditions 73

Heterogeneous oxidation

Effect of pH in the Pt-catalyzed oxidation of D-glucose to D-gluconic acid 111

Hydrocarbons

Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79

Hydroformylation

Water-soluble metal complexes and catalysts. Part 7 ¹. New efficient water-soluble catalysts for two-phase olefin hydroformylation: BINAS-Na, a superlative in propene hydroformylation 65

Hydrogenation

Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis 145

Hydrogen peroxide

Oxidation of methoxybenzenes to *p*-benzoquinones catalyzed by methyltrioxorhenium(VII) 15

Hydrosoluble phosphine

Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity 29

Hydroxylation

Comparison of methane hydroxylation activity with intact cells and cell-free extracts of *Methylosinus trichosporium* OB3b L135

Ibuprofen

Alteration of the activity and selectivity of immobilized lipases by the effect of the amount of water in the organic medium 195

Immobilized enzymes

Alteration of the activity and selectivity of immobilized lipases by the effect of the amount of water in the organic medium 195

2,4-Ionene

Effects of solvents on the cobalt phthalocyanine-catalyzed oxidation of hydrophobic thiols 7

Ironporphyrin

Study of catalytic activity of nitro substituted ironporphyrins 41

2-Keto-D-gluconic acid

Effect of pH in the Pt-catalyzed oxidation of D-glucose to D-gluconic acid 111

Lipase

Activity decay and conformational change of lipase in presence of organic solvents. A fluorescence study of *Candida rugosa* lipase 119

Lipases

Alteration of the activity and selectivity of immobilized lipases by the effect of the amount of water in the organic medium 195

Magnesium oxide

Oxidative dehydrogenation of propane on VAPO-5, V₂O₅/ALPO₄-5 and V₂O₅/MgO catalysts. Nature of selective sites 173

Manganese

Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79

Metal oxides

Influence of hydrogen sulfide adsorption on the catalytic properties of metal oxides 49

Methane hydroxylation

Comparison of methane hydroxylation activity with intact cells and cell-free extracts of *Methylosinus trichosporium* OB3b L135

Methane monooxygenase

Comparison of methane hydroxylation activity with intact cells and cell-free extracts of *Methylosinus trichosporium* OB3b L135

Methanol

Synthesis of acetic acid from methanol alone by homogeneous metal complex catalyst. Part II ¹. Mechanistic study on methyl acetate formation from methanol alone by [(η^5 -C₅H₅)(PPh₃)₂RuX] (X = Cl, SnF₃) complex catalyst 35

Methyl acetate

Synthesis of acetic acid from methanol alone by homogeneous metal complex catalyst. Part II ¹. Mechanistic study on methyl acetate formation from methanol alone by [(η^5 -C₅H₅)(PPh₃)₂RuX] (X = Cl, SnF₃) complex catalyst 35

Methylosinus trichosporium OB3b

Comparison of methane hydroxylation activity with intact cells and cell-free extracts of *Methylosinus trichosporium* OB3b L135

Methyltrioxorhenium

Oxidation of methoxybenzenes to *p*-benzoquinones catalyzed by methyltrioxorhenium(VII) 15

Micelle

Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity 29

Mol mass regulation

Complex catalysis. Part XLVI ¹. The mechanism of mol mass regulation in the allyl nickel complex catalyzed 1,4-*cis* polymerization of butadiene 21

NaBH₄

Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis 145

Nickel

Complex catalysis. Part XLVI ¹. The mechanism of mol mass regulation in the allyl nickel complex catalyzed 1,4-*cis* polymerization of butadiene 21

Nitro substituted ironporphyrin

Study of catalytic activity of nitro substituted ironporphyrins 41

NMR characterization

Stacked phthalocyanines in VPI-5 pores as evidenced by CPDOR ¹H-²⁷Al NMR 183

NO decomposition

A copper/silica catalyst prepared from a monolayer film of copper 2,2'-bipyridine dimer on Cab-O-Sil 85

Octadienol

Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity 29

Olefins

Water-soluble metal complexes and catalysts. Part 7 ¹. New efficient water-soluble catalysts for two-phase olefin hydroformylation: BINAS-Na, a superlative in propene hydroformylation 65

Palladium-catalyzed, arylation of ethylene (the Heck reaction) under aqueous conditions 73

Organic media

Activity decay and conformational change of lipase in presence of organic solvents. A fluorescence study of *Candida rugosa* lipase 119

Oxidation

Oxidation of methoxybenzenes to *p*-benzoquinones catalyzed by methyltrioxorhenium(VII) 15

Study of catalytic activity of nitro substituted ironporphyrins 41

Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79

Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites 139

Oxidative dehydrogenation

Oxidative dehydrogenation of propane on VAPO-5, V₂O₅/ALPO₄-5 and V₂O₅/MgO catalysts. Nature of selective sites 173

Palladium

Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity 29

Palladium catalysts

Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate-methylene bis(acrylamide): a promising support for metal catalysis 145

p-Benzoquinone

Oxidation of methoxybenzenes to *p*-benzoquinones catalyzed by methyltrioxorhenium(VII) 15

- Peroxo complex**
Oxidation of methoxybenzenes to *p*-benzoquinones catalyzed by methyltrioxorhenium(VII) 15
- Phthalocyanine**
Stacked phthalocyanines in VPI-5 pores as evidenced by CPDOR ^1H - ^{27}Al NMR 183
- Phthalocyanine derivatives**
Effects of solvents on the cobalt phthalocyanine-catalyzed oxidation of hydrophobic thiols 7
- Poly-dimethylacrylamide-*p*-styrylsulfonate–methylene bis(acrylamide)**
Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate–methylene bis(acrylamide): a promising support for metal catalysis 145
- Polynuclear copper complex**
A copper/silica catalyst prepared from a monolayer film of copper 2,2'-bipyridine dimer on Cab-O-Sil 85
- Polyoxocations**
Vapour phase deep oxidation of chlorinated hydrocarbons catalyzed by pillared bentonites 139
- Poly(quaternary ammonium) salt**
Effects of solvents on the cobalt phthalocyanine-catalyzed oxidation of hydrophobic thiols 7
- Porphyrins**
Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79
- Propane**
Oxidative dehydrogenation of propane on VAPO-5, $\text{V}_2\text{O}_5/\text{ALPO}_4\text{-5}$ and $\text{V}_2\text{O}_5/\text{MgO}$ catalysts. Nature of selective sites 173
- Propene**
Water-soluble metal complexes and catalysts. Part 7 ¹. New efficient water-soluble catalysts for two-phase olefin hydroformylation: BINAS–Na, a superlative in propene hydroformylation 65
- Pt/C catalyst**
Effect of pH in the Pt-catalyzed oxidation of D-glucose to D-gluconic acid 111
- Reducing agent**
Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate–methylene bis(acrylamide): a promising support for metal catalysis 145
- Ruthenium complex**
Synthesis of acetic acid from methanol alone by homogeneous metal complex catalyst. Part II ¹. Mechanistic study on methyl acetate formation from methanol alone by $[(\eta^3\text{-C}_3\text{H}_5)_2(\text{PPh}_3)_2\text{RuX}]$ (X = Cl, SnF₃) complex catalyst 35
- SDS**
Effects of sodium dodecyl sulphate concentration on the autooxidation of 3,5-di-*tert*-butylcatechol in solutions of hydrated transition metal ions L135
- Silica**
A copper/silica catalyst prepared from a monolayer film of copper 2,2'-bipyridine dimer on Cab-O-Sil 85
- SQUID**
A copper/silica catalyst prepared from a monolayer film of copper 2,2'-bipyridine dimer on Cab-O-Sil 85
- Stability**
Activity decay and conformational change of lipase in presence of organic solvents. A fluorescence study of *Candida rugosa* lipase 119
- Supported catalysts**
A copper/silica catalyst prepared from a monolayer film of copper 2,2'-bipyridine dimer on Cab-O-Sil 85
Oxidative dehydrogenation of propane on VAPO-5, $\text{V}_2\text{O}_5/\text{ALPO}_4\text{-5}$ and $\text{V}_2\text{O}_5/\text{MgO}$ catalysts. Nature of selective sites 173
- Swellability**
Microporous poly-*N,N*-dimethylacrylamide-*p*-styrylsulfonate–methylene bis(acrylamide): a promising support for metal catalysis 145
- Telomerization**
Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity 29
- Tetraphenylphosphonium peroxomonosulfate**
Formation and reactivity toward hydrocarbons of oxomanganese porphyrins in the presence of anionic bases 79
- Transition metal ions**
Effects of sodium dodecyl sulphate concentration on the autooxidation of 3,5-di-*tert*-butylcatechol in solutions of hydrated transition metal ions L135
- Trialkylamine**
Palladium catalyzed telomerization of butadiene with water in a two phase system: drastic effect of the amine structure on the rate and selectivity 29
- Turnover number**
Comparison of methane hydroxylation activity with intact cells and cell-free extracts of *Methylosinus trichosporium* OB3b L135
- Tyrosinase**
Synthetic mimics of tyrosinase: catechols from *ortho*-, *meta*- and *para*-substituted phenols and copper(I) complexes 187
- Vanadium**
Oxidative dehydrogenation of propane on VAPO-5, $\text{V}_2\text{O}_5/\text{ALPO}_4\text{-5}$ and $\text{V}_2\text{O}_5/\text{MgO}$ catalysts. Nature of selective sites 173
- VAPO-5**
Oxidative dehydrogenation of propane on VAPO-5, $\text{V}_2\text{O}_5/\text{ALPO}_4\text{-5}$ and $\text{V}_2\text{O}_5/\text{MgO}$ catalysts. Nature of selective sites 173
- VPI-5**
Stacked phthalocyanines in VPI-5 pores as evidenced by CPDOR ^1H - ^{27}Al NMR 183
- Water-soluble catalysts**
Water-soluble metal complexes and catalysts. Part 7 ¹. New efficient water-soluble catalysts for two-phase olefin hydroformylation: BINAS–Na, a superlative in propene hydroformylation 65